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ABSTRACT

The University Library System at the University of Minnesota, Twin Cities Campus, is a decentralized system of 35 libraries spread over 3 campuses in 2 cities. This study evaluated the performance of two libraries in the system--Walter Library and the Institute of Technology Libraries--that provide document delivery services to assist faculty members in obtaining documents from any library within the system. The evaluation process entailed both analysis of past performance data and a survey of the faculties served by the two delivery services. Past performance data were cumulated and analyzed to determine the volume and the nature of the materials requested and each library's performance in filling these requests. These analyses are presented in the first part of this report. The self-administered questionnaires, which were completed by 52% of the faculty in all of the departments served by both delivery services, was designed to fulfill two objectives: to gather from the nonusers of the services data describing their reasons for nonuse and the nature and extent of their use of the university library system; and to gather from the users data describing their reasons for use, the nature and extent of their use of the library system, and their evaluations of the document delivery service. A detailed discussion of the design of the survey and the results of the data analyses are presented in the second part of the report. Appendices A and B contain copies of correspondence and questionnaires mailed to nonusers and users of the document delivery service. (THC)

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EVALUATION OF THE DOCUMENT DELIVERY SERVICE PROVIDED BY UNIVERSITY LIBRARIES, TWIN CITIES CAMPUS, UNIVERSITY OF MINNESOTA

FINAL REPORT OF A RESEARCH PROJECT
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COUNCIL OF LIBRARY RESOURCES,
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INTRODUCTION

The University Library system at the University of Minnesota, Twin Cities Campus, is a decentralized system of 35 libraries spread over three campuses in two cities. As a result, the location and retrieval of library materials can be a confusing and time-consuming process for a patron. To help alleviate some of these problems, two libraries in the system, Walter Library and the Institute of Technology Libraries, provide Document Delivery services to assist faculty members in obtaining documents from any library within the system. Walter Library houses the collections and provides the services to support the faculties of the College of Education, the General College, and the departments of Art History, Music, and Psychology within the College of Liberal Arts. The Institute of Technology Libraries house the collections and provide the services to support the faculties of the Institute, which is comprised of 18 science and engineering departments.

Requesting a document, that is, a book, a periodical article, or microform, from any library within the University Library system is a simple process. Both services have telephone answering machines which faculty members can call at any time to leave a request for a specific document. Every effort is made by the services to locate, photocopy if necessary, and deliver requested documents within 24 to 48 hours. There is no limit to the number of documents that can be requested and no charge for the loan of a document. The document is charged out to the requestor and is subject to the regular circulation policies and procedures of the lending library. The cost of photocopying a document is

billed to the requestor's department.

Walter Library's Document Delivery service began operation in March of 1974. The service was originally designed as an "experimental project" by the Education-Psychology-Library Science (EPLS) Library. The primary purpose of this "project" was to generate data which could be used to determine the adequacy of the EPLS Library collection for the College of Education faculty members. Therefore, while requests for documents by any University personnel were accepted, College of Education faculty members were considered the primary target group. The service had been scheduled to terminate in June of 1974. However, because of the overwhelming enthusiasm which was expressed for the service, additional funds were provided by the Library to continue Document Delivery through June of 1975. After June, 1975, Document Delivery was subsidized by the various departments using the service. These subsidies ended in the Fall, 1980. Since then, Document Delivery has charged $.15 per page for copied material to help cover the costs of providing the service.

Walter Library's Document Delivery service has been in continuous operation since March, 1974, except for a nine month interruption of service in 1981 - 82. Document Delivery is staffed by part-time student employees and actively seeks to serve all of the faculty in the academic units served by Walter Library. In actual practice, requests received from any member of the faculty or other University personnel are honored.

The Institute of Technology Libraries began a Document Delivery service in May of 1980. The faculty of the Institute of Technology were considered the primary target group, but once again, requests from any

member of the faculty or other University personnel were accepted. Initially, the cost of the service was absorbed by the Institute of Technology Libraries. Presently, a charge of $.15 per page for copied material is also being levied by the Institute of Technology Document Delivery service to help sustain the service.

The Institute of Technology Libraries' Document Delivery service was patterned after Walter Library's Document Delivery service and with few exceptions is similar in design and function. The faculty can call the telephone answering machine to place a request, or, if they wish, they can fill out a Document Delivery request form in any Institute of Technology library. However, unlike Walter Library's Document Delivery service which forwards all documents to requestors by campus mail, the Institute of Technology Libraries' Document Delivery service uses its own personnel to hand deliver all documents as quickly as possible to the requestor's department. A pickup service for returning documents is also available to the faculty.

The Institute of Technology Libraries' Document Delivery service has been in continuous operation since its inception in May, 1980. No major changes in this service have been made.

PURPOSE OF STUDY

The purpose of this study was to evaluate the performances of these two document delivery services. The evaluation process entailed both an

analysis of past performance data and a survey of the faculties served by the two delivery services.

Past performance data were cumulated and analyzed to determine the volume and the nature of the materials requested, and each library's performance in filling these requests. These analyses are presented in Part I of this report.

The survey of the faculty in all of the departments served by both delivery services was designed to fulfill two general objectives: 1) to gather from the nonusers of the services data describing a) their reasons for nonuse and b) the nature and extent of their use of the University Library system; and 2) to gather from the users of the services data describing a) their reasons for use, b) the nature and extent of their use of the University Library system, and c) their evaluations of the service. It was anticipated that these data could be tested to determine whether the use of a document delivery service was related to the use of other library services on campus. The underlying question of interest was, "Does a document delivery service serve better the needs of library users or does it bring library service to faculty members who would otherwise not be active library users?" A detailed discussion of the design of the survey and the results of the data analyses is presented in Part II of this report.

PART I:

EVALUATION OF PAST PERFORMANCE DATA

Since their inceptions, both delivery services have collected data describing their levels of activity and overall performance. The types of data collected by the two services differ slightly and are presented separately.

PERFORMANCE DATA: INSTITUTE OF TECHNOLOGY LIBRARIES DOCUMENT DELIVERY SERVICE

The number of requests received, the numbers of different types of documents requested, and the number of requests filled have been tabulated daily by Document Delivery. Unfortunately, the numbers of different types of documents provided have not been collected. These data were then cumulated into annual reports for each fiscal year of operation (July - June).

A summary of these data is presented in Table 1. The data for the current year of operation (1983 - 1984) are available only through February of 1984. These data indicate that: 1) the greatest number of requests was received during the first year of operation; 2) the number of requests received has declined annually with the possibility of a slight, projected rebound during the current fiscal year; 3) the relative proportions of journal articles to books requested have run roughly 80% to 20%; and 4) the overall performance of the service, as measured by the percent of requests filled, has remained relatively stable at approximately 78%. Unfortunately, since the numbers of different types of documents provided are not available, it is impossible to determine the percent of requests filled for journal articles or books.

TABLE 1

DOCUMENT DELIVERY SERVICE PERFORMANCE:
INSTITUTE OF TECHNOLOGY LIBRARIES

PERIOD	NUMBER OF REQUESTS RECEIVED (TYPE BY %)	NUMBER OF REQUESTS FILLED	PERCENT OF REQUESTS FILLED
July 1980 - June 1981	1721 (Books = 18%) (Journals = 80%) (Other = 2%)	1325	77%
July 1981 - June 1982	1296 (Books = 20%) (Journals = 78%) (Other = 2%)	1019	79%
July 1982 - June 1983	1129 (Books = 14%) (Journals = 86%)	894	79%
July 1983 - Feb. 1984 (Projection for full year)	809 (1200) (Books = 16%) (Journals = 84%)	613	76%

PERFORMANCE DATA: WALTER LIBRARY DOCUMENT DELIVERY SERVICE

The number of requests received, the number of requests filled, and the numbers of different types of documents provided have been tabulated daily by Document Delivery. Unfortunately, the numbers of different types of documents requested have not been collected. These data were then cumulated into annual reports for each academic year of operation (Fall Quarter - Summer Session II).

Summaries of these available data are presented in Tables 2 and 3. The data for the current year of operation (1983 - 1984) are available only through the Winter Quarter 1984. The data presented in Table 2 indicate that: 1) the annual numbers of requests received varied considerably during the first seven years of operation; 2) after the nine month interruption of service in 1981-82, the number of requests received failed to rebound to previous levels in spite of frequent direct mailings to faculty members promoting the service; and 3) the overall performance of the service, as measured by the percent of requests filled, declined steadily for the first seven years of service from an initial high of 93% in 1974 - 1975 to a low of 79% in 1980 - 1981 and then rebounded slightly when the service was resumed in 1982.

The data presented in Table 3 indicate that the relative proportions of journal articles to books provided by Document Delivery have run roughly 75% to 25%. Unfortunately, since the numbers of different types of documents requested are not available, it is impossible to determine the percent of requests filled for journal articles or books.

TABLE 2

DOCUMENT DELIVERY SERVICE PERFORMANCE:
WALTER LIBRARY

PERIOD	NUMBER OF REQUESTS RECEIVED	NUMBER OF REQUESTS FILLED	PERCENT OF REQUESTS FILLED
Spring quarter '74 - Spring quarter '75	2773	2580	93%
Fall quarter '75 - Summer sessions '76	2317	1991	86%
Fall quarter '76 - Summer sessions '77 *	2475	2125	86%
Fall quarter '77 - Summer sessions '78	3743	3126	84%
Fall quarter '78 - Summer sessions '79	3006	2463	82%
Fall quarter '79 - Summer sessions '80	3278	2639	81%
Fall quarter '80 - Summer sessions '81	2497	1975	79%
Service interrupted '81 - '82	----	----	---
Fall quarter '82 - Summer sessions '83	495	404	82%
Fall quarter '83 - Winter quarter '84	595	496	83%

*Note. - No data are available for Summer Session I '77.

TABLE 3

NUMBER OF REQUESTS FILLED BY TYPE OF MATERIAL:
WALTER LIBRARY DOCUMENT DELIVERY

	'77 - '78	'78 - '79	'79 - '80	'80 - '81	'82 - '83	'83 - '84*
NUMBER OF REQUESTS FILLED	3126	2463	2639	1975	404	496
BOOKS	733(23%)	513(21%)	622(24%)	438(22%)	72(18%)	139(28%)
JOURNALS	2329(75%)	1867(76%)	1984(75%)	1493(76%)	327(81%)	345(70%)
OTHER	64(2%)	83(3%)	33(1%)	44(2%)	5(1%)	12(2%)

*Note. - Data available for Fall and Winter Quarters only.

PART II:

FACULTY SURVEY

OBJECTIVES OF FACULTY SURVEY

The objectives of the survey of the current service population were as follows:

1) to determine if the nonuse/use of Document Delivery is related to the subjects'
    a) academic status; or
    b) collegiate affiliation; or
    c) other uses of library services on campus.
2) to identify, from among the nonusers of Document Delivery, the reasons for nonuse.
3) to determine, from among the users of Document Delivery, if their perceived degree of use is related to their
    a) academic status; or
    b) collegiate affiliation; or
    c) other uses of library services on campus; or
    d) reasons for using the service; or
    e) reasons for not using the service for all of their document requirements; or
    f) evaluations of the service.
4) to determine, from among the users of Document Delivery, if their estimates of the proportions of requests submitted to Document Delivery that were intended to support their teaching efforts and their research efforts, are related to their

a) academic status; or

b) collegiate affiliation; or

c) other uses of library services on campus; or

d) reasons for using the service; or

e) reasons for not using the service for all of their document requirements; or

f) evaluations of the service.

DESIGN

The survey was designed as a census of all of the faculty in the various academic departments served by the Institute of Technology Libraries and Walter Library. To the extent that 52% of this population responded, the data represent the responses of a self-selected sample. To the extent that this population and self-selected sample are representative of faculty at large, research universities with decentralized library resources, the data may be generalizable.

INSTRUMENTATION AND MEASUREMENT

The data were designed to be collected by means of self-administered questionnaires, one for the users of Document Delivery and one for the

nonusers of Document Delivery. Both questionnaires included questions designed to measure the subject's a) reasons for not using Document Delivery (at all or all of the time); b) extent of use of the University Library System; c) academic status; and d) collegiate affiliation. In addition, the user questionnaire also included questions designed to measure the subject's a) reasons for using Document Delivery; b) satisfaction with the service; c) estimates of the proportions of requests that were intended to support his/her teaching efforts and his/her research efforts; d) opinion of the importance of having the Document Delivery service available; and e) opinion of the budget priority that the University Library system should give to the service. Copies of both questionnaires are provided in the Appendices.

Measurement of Reasons For Not Using Document Delivery

The subject was presented with nine possible reasons for not using Document Delivery (or not using Document Delivery for all of his/her document needs); for example, "I prefer to browse my subject area before selecting a document." Each reason was followed by a five-point scale with response categories ranging from "Not at all applicable" to "Very strongly applicable." The subject was asked to select the response category which best described the degree to which each reason for nonuse applied to him/her. The questions measuring the reasons for nonuse are numbered 3.A through 3.I in the user questionnaire (p. 41) and 2.A through 2.I in the nonuser questionnaire (p. 53).

Measurement of Extent of Use of the University Library System

The subject was asked to estimate the extent of his/her use of campus libraries in terms of how often he/she a) personally visits a library; b) sends someone else to a library to get needed material; c) calls a library for information or assistance; and d) frequents a departmental reading room. Each of these types of use was followed by a six-point scale with response categories ranging from "Never" to "More than once a week." The subject was asked to select the response category which best described his/her estimate of degree of use. The questions measuring extent of library use are numbered 9.A through 11 in the user questionnaire (p. 43) and 3.A through 5 in the nonuser questionnaire (p. 54).

Measurement of Academic Status

The subject was asked to indicate his/her current academic status at the university. The response categories included the regular professorial ranks, research associate or fellow, professional/administrative class, and other. This question is number 12 in the user questionnaire (p. 44) and number 6 in the nonuser questionnaire (p. 55).

Measurement of Collegiate Affiliation

The subject was asked to indicate the college with which he/she is affiliated. These included the College of Liberal Arts, College of Education, General College, Institute of Technology and others. This

question is number 13 in the user questionnaire (p. 44) and number 7 in the nonuser questionnaire (p. 55).

Measurement of the Extent of Use of Document Delivery (User Questionnaire Only)

The subject was asked to estimate, from among all of the documents that he/she sought in the University Library system, the proportion that was requested through Document Delivery. This question was followed by a five-point scale with response categories ranging from "Fewer than 20%" through "80% or more." The subject was asked to select the response category which best described his/her estimate of extent of use of Document Delivery. This is question 2 in the user questionnaire (p. 41).

The subject was also asked to estimate, from among all of the documents that he/she requested through Document Delivery, the proportions that were requested to support his/her teaching efforts and research efforts. These two questions were followed by five-point scales similar to the one described above. These are questions 6.A and 6.B in the user questionnaire (p. 43).

Measurement of Reasons For Using Document Delivery (User Questionnaire Only)

The subject was presented with five possible reasons for using Document Delivery; for example, "Using Document Delivery saves me time." Each reason was followed by a five-point scale with response categories ranging from "Not at all applicable" to "Very strongly applicable." The

subject was asked to select the response category which best described the degree to which each reason for use applied to him/her. The questions measuring the reasons for use are numbered 4.A through 4.E in the user questionnaire (p. 42).

Measurement of Evaluation of Document Delivery (User Questionnaire Only)

The subject was asked to evaluate Document Delivery in three ways. First, the subject was asked how satisfied he/she is with the service. This question was followed by a six-point scale with response categories ranging from "Strongly dissatisfied" to "Strongly satisfied." Second, the subject was asked how important to him/her is the availability of the service. This question was followed by a four-point scale with response categories ranging from "Unimportant" to "Strongly important." Third, the subject was asked what priority he/she thinks the library should give to the service in a time of tight budgets. This question was followed by a five-point scale with response categories ranging from "Very low priority" to "Very high priority." For each question the subject was asked to select the response category which best described his/her opinion. These questions are numbered 5, 7, and 8 respectively in the user questionnaire (p. 42).

DATA COLLECTION

Based upon records kept by Document Delivery, all members of the faculty who had requested a document since the beginning of the academic year

(September 1983) were classified as users of the service. All members of the faculty in the departments served by Document Delivery who had not requested a document since the beginning of the academic year were classified as nonusers of the service.

On March 23, 1984 user questionnaires were mailed to the 155 identified users of Document Delivery and nonuser questionnaires were mailed to the 1006 identified nonusers of the service. Each questionnaire was accompanied by an appropriate cover letter and a return envelope addressed to the project director. On April 5, a day after the requested due date, a follow-up letter was mailed to all subjects. Since the responses were anonymous, the letter served the dual purposes of thanking the subject for responding, in the event that the subject had already responded, and encouraging the subject to return a completed questionnaire, in the event that the subject had not as yet responded. A total of 1161 questionnaires were mailed of which 34 were returned with messages indicating that for a variety of reasons (e.g. separation, sabbatical, etc.) the subject was not available. Of the remaining 1127 questionnaires, 582 were returned for a response rate of 52%. A summary of the response data is presented in Table 4. Copies of the cover letters and the follow-up letter are presented in the Appendices.

DATA ANALYSES

Descriptive statistics for the responses to the questions in the user questionnaire are presented in Table A.1 in Appendix A. Descriptive sta-

TABLE 4

NUMBERS OF RESPONDENTS TO THE SURVEY

	NUMBER OF QUESTIONNAIRES SENT	NUMBER OF QUESTIONNAIRES DISQUALIFIED	NUMBER OF RESPONSES
IT USERS	71	0	43
IT NONUSERS	457	18	205
IT TOTAL	528	18	248
WALTER USERS	84	1	56
WALTER NONUSERS	549	10	220
WALTER TOTAL	633	11	276
OTHER USERS			11
ANONYMOUS USERS			5
OTHER NONUSERS			36
ANONYMOUS NONUSERS			6
ANONYMOUS DISQUALIFIED		5	
GRAND TOTALS	1161	34	582

tistics for the responses to the questions in the nonuser questionnaire are presented in Table B.1 in Appendix B.

Correlates of Nonuse/Use of Document Delivery

In order to identify the correlates of nonuse/use of Document Delivery, nonuse/use was dummy coded (0,1) and then regressed onto each of the following sets of variables:

a) academic status, also dummy coded into the following groups: regular tenure-track faculty appointments, research faculty appointments, professional/administrative appointments, and other appointments.

b) collegiate affiliation, also dummy coded into the following groups: College of Liberal Arts, College of Education, General College, Institute of Technology, and other.

c) other uses of library services on campus (Questions 9 A - 11, User Questionnaire; Questions 3 A - 5, Nonuser Questionnaire).

The results of these analyses, reported in Table 5, indicate that

a) nonuse/use of Document Delivery was not related to academic status.

b) nonuse/use of Document Delivery was positively correlated with affiliation with the College of Education and negatively correlated with affiliation with General College. However, these correlations, although statistically significant, are extremely weak and trivial. A trivial relationship is defined as a meaningless relationship that is statistically

TABLE 5

CORRELATES OF NONUSE/USE OF DOCUMENT DELIVERY

VARIABLES	N	r	r^2	α
Academic Status				
Faculty	582	.02	.00	n.s.
Research	582	.04	.00	n.s.
Professional/Administrative	582	-.03	.00	n.s.
Collegiate Affiliation				
College of Liberal Arts	582	-.01	.00	n.s.
College of Education	582	.11	.01	.01
General College	582	-.12	.01	.01
Institute of Technology	582	-.05	.00	n.s.
Other Uses of Library Services				
... personal visits	576	.03	.00	n.s.
... sending someone else	576	.14	.02	.001
... calling a library	574	.27	.07	.001
... access to department reading room	576	-.03	.00	n.s.
... use of reading room	314	.00	.00	n.s.

significant only because of a very large sample. In this case, each of these variables explained only .01 of the variance of nonuse/use. Neither affiliation with the College of Liberal Arts nor affiliation with the Institute of Technology was correlated with nonuse/use of Document Delivery.

c) nonuse/use of Document Delivery was positively correlated with the degree to which the subjects reported calling a library for information and sending someone else to a library to obtain needed material. This latter correlation, however, appeared to be trivial. None of the other measures of use of library services was significant.

Nonusers' Reasons For Nonuse of Document Delivery

The means of the nonusers' responses to the questions measuring the reasons for nonuse (Questions 2.A - 2.I, Nonuser Questionnaire) are presented in Table 6. These data indicate that the principal reasons for nonuse appeared to be that the subjects felt that they could more easily obtain the documents they needed from the library and that they preferred to browse a subject area before selecting a document. Interestingly, among the least cited reasons for nonuse were the costs of the service, either to the subjects or the subjects' departments.

Correlates of Perceived Degree of Use of Document Delivery

In order to identify the correlates of the users' perceived degree of use of Document Delivery, the users' perceived degree of use (Question 2)

TABLE 6

RANKING OF MEAN SCORES TO THE NONUSERS' RESPONSES TO THE REASONS FOR NONUSE

REASON FOR NONUSE (FIVE-POINT SCALE)	N	$\bar{X}$	S.D.
... document can be obtained more easily from a library	302	3.13	1.38
... prefer to browse	302	2.79	1.31
... forget about using service	290	2.34	1.31
... lack a specific citation	302	2.32	1.25
... need the document sooner than it can be delivered	302	2.21	1.31
... personal cost inhibiting	302	2.15	1.35
... document can be obtained more easily from a colleague	290	2.01	1.00
... department cost inhibiting	302	1.90	1.35
... prefer not to talk to the tape recorder	289	1.65	1.13

was regressed onto each of the following sets of variables:

a) academic status (dummy coded);

b) collegiate affiliation (dummy coded);

c) other uses of library services on campus (Questions 9A - 11);

d) reasons for using the service (Questions 4A - F);

e) reasons for not using the service for all of their document requirements (Questions 3.A - 3.I); and

f) evaluations of the service (Questions 5, 7 and 8).

The results of these analyses, reported in Table 7, indicate that

a) perceived degree of use was not related to academic status.

b) perceived degree of use was positively correlated with affiliation with the College of Education and not correlated with affiliations with the College of Liberal Arts, General College, or Institute of Technology.

c) perceived degree of use was inversely correlated with the users' perceptions of how often they personally visit a library of the University Library system and not correlated with any of the other measures of use of library services.

d) perceived degree of use was positively correlated with four of the five reasons for use. These were, in order of strongest to weakest correlations: "If the document is not immediately available, I appreciate Document Delivery's explanation", "Using Document Delivery saves me time", "Using Document Delivery is less frustrating", and "Using Document Delivery requires less effort." Interestingly, the reason "I expect Document Delivery will be more successful at finding

TABLE 7

CORRELATES OF PERCEIVED DEGREE OF USE OF DOCUMENT DELIVERY

VARIABLES	N	r	r^2	α
Academic Status				
Faculty	101	.08	.01	n.s.
Research	101	-.10	.01	n.s.
Professional/Administrative	101	.08	.01	n.s.
Collegiate Affiliation				
College of Liberal Arts	101	-.14	.02	n.s.
College of Education	101	.25	.06	.01
General College	101	.02	.00	n.s.
Institute of Technology	101	-.08	.01	n.s.
Other Uses of Library Services				
... personal visits	101	-.29	.08	.01
... sending someone else	101	-.01	.00	n.s.
... calling a library	100	-.16	.03	n.s.
... access to department reading room	99	.02	.00	n.s.
... use of reading room	49	-.11	.01	n.s.
Reasons For Using Document Delivery				
... saves time	99	.37	.14	.001
... requires less effort	99	.22	.05	.01
... is less frustrating	99	.34	.12	.001
... Document Delivery will be more successful	99	.12	.01	n.s.
... appreciation of Document Delivery's follow-up	99	.39	.15	.001

TABLE 7 (cont'd)

CORRELATES OF PERCEIVED DEGREE OF USE OF DOCUMENT DELIVERY

VARIABLES	N	r	r^2	α
Reasons For Limited Use of Document Delivery				
... lack a specific citation	100	.07	.00	n.s.
... prefer to browse	100	-.23	.05	.01
... need the document sooner than it can be delivered	100	-.20	.04	.05
... personal cost inhibiting	100	-.13	.02	n.s.
... department cost inhibiting	100	-.05	.00	n.s.
... document can be obtained more easily from a library	100	-.24	.06	.01
... document can be obtained more easily from a colleague	97	.17	.03	.05
... forget about using service	96	-.40	.16	.001
... prefer not to talk to the tape recorder	96	-.22	.05	.05
Evaluations of Document Delivery				
... satisfaction with service	98	.23	.05	.01
... importance of availability of service	100	.42	.18	.001
... budget priority for service	98	.52	.27	.001

the document" was not correlated with perceived degree of use.

e) perceived degree of use was inversely correlated with five of the nine reasons for limited use. They were, in order of strongest to weakest correlations: "I forget about Document Delivery", "I can easily obtain the document I need from a library of the University system without using Document Delivery", "I prefer to browse my subject area before selecting a document", "I prefer not to talk to a tape recorder answering machine", and "I need the document sooner than it can be delivered." Perceived degree of use was surprisingly correlated positively with "I can easily obtain the document I need from a colleague" and not correlated with "I know in general what I need but lack a specific citation", "I find the cost of using Document Delivery inhibiting" and "My department finds the cost of using Document Delivery inhibiting."

f) perceived degree of use was positively correlated with satisfaction with the service, importance to the user of the availability of the service, and the user's opinion of the budget priority that the library should give to Document Delivery.

Correlates of the Estimated Proportions of Document Requests for Teaching and Research Efforts

While it was realized that the subjects' estimates of the percent of requests that were initiated to support their teaching efforts should have

been the obverse of their estimates of the percent of requests that were initiated to support their research efforts, each of these estimates (Questions 6 A and 6 B) was in turn regressed onto each of the following sets of variables:

a) academic status (dummy coded);

b) collegiate affiliation (dummy coded);

c) other uses of library services on campus (Questions 9A - 11);

d) reasons for using the service (Questions 4A - F);

e) reasons for not using the service for all document requirements (Questions 3.A - 3.I); and

f) evaluations of the service (Questions 5, 7 and 8).

The results of these analyses, reported in Tables 8 and 9, indicate that

a) neither estimate was correlated with academic status.

b) the estimate of the percent of requests that were initiated to support teaching efforts was positively correlated with affiliation with General College and the College of Education (albeit weakly), inversely correlated with affiliation with the Institute of Technology, and not correlated with affiliation with the College of Liberal Arts.

The estimate of the percent of requests that were initiated to support research efforts was inversely correlated with affiliation with the College of Education and with General College, positively correlated with affiliation with the Institute of Technology, and not correlated with affiliation with the College of Liberal Arts. All three of these corre-

TABLE 8

CORRELATES OF THE ESTIMATED PROPORTIONS OF DOCUMENT REQUESTS FOR TEACHING EFFORTS

VARIABLES	N	r	r^2	α
Academic Status				
Faculty	107	.12	.01	n.s.
Research	107	-.14	.02	n.s.
Professional/Administrative	107	.13	.02	n.s.
Collegiate Affiliation				
College of Liberal Arts	107	-.01	.00	n.s.
College of Education	107	.18	.03	.05
General College	107	.31	.10	.001
Institute of Technology	107	-.28	.08	.01
Other Uses of Library Services				
... personal visits	107	-.12	.01	n.s.
... sending someone else	107	-.02	.00	n.s.
... calling a library	107	-.14	.02	n.s.
... access to department reading room	106	-.06	.00	n.s.
... use of reading room	53	-.13	.02	n.s.
Reasons For Using Document Delivery				
... saves time	106	.12	.01	n.s.
... requires less effort	106	.01	.00	n.s.
... is less frustrating	106	-.02	.00	n.s.
... Document Delivery will be more successful	106	-.04	.00	n.s.
... appreciation of Document Delivery's follow-up	106	.08	.01	n.s.

TABLE 8 (cont'd)

CORRELATES OF THE ESTIMATED PROPORTIONS OF DOCUMENT REQUESTS FOR TEACHING EFFORTS

VARIABLES	N	r	r^2	α
Reasons For Limited Use of Document Delivery				
... lack a specific citation	97	.11	.01	n.s.
... prefer to browse	97	.02	.00	n.s.
... need the document sooner than it can be delivered	97	-.20	.04	.05
... personal cost inhibiting	97	.15	.02	n.s.
... department cost inhibiting	97	.23	.05	.01
... document can be obtained more easily from a library	97	-.24	.06	.01
... document can be obtained more easily from a colleague	93	-.12	.01	n.s.
... forget about using service	93	-.02	.00	n.s.
... prefer not to talk to the tape recorder	92	-.12	.01	n.s.
Evaluations of Document Delivery				
... satisfaction with service	104	.13	.02	n.s.
... importance of availability of service	106	.05	.00	n.s.
... budget priority for service	104	.21	.04	.05

TABLE 9

CORRELATES OF THE ESTIMATED PROPORTIONS OF DOCUMENT REQUESTS FOR RESEARCH EFFORTS

VARIABLES	N	r	r^2	α
Academic Status				
Faculty	112	-.14	.02	n.s.
Research	112	.06	.00	n.s.
Professional/Administrative	112	.13	.02	n.s.
Collegiate Affiliation				
College of Liberal Arts	112	.00	.00	n.s.
College of Education	112	-.19	.04	.05
General College	112	-.15	.02	.05
Institute of Technology	112	.18	.03	.05
Other Uses of Library Services				
... personal visits	112	.05	.00	n.s.
... sending someone else	112	.06	.00	n.s.
... calling a library	112	.11	.01	n.s.
... access to department reading room	111	.07	.01	n.s.
... use of reading room	56	.06	.00	n.s.
Reasons For Using Document Delivery				
... saves time	111	.05	.00	n.s.
... requires less effort	111	.01	.00	n.s.
... is less frustrating	111	.01	.00	n.s.
... Document Delivery will be more successful	111	.01	.00	n.s.
... appreciation of Document Delivery's follow-up	111	.00	.00	n.s.

TABLE 9 (cont'd)

CORRELATES OF THE ESTIMATED PROPORTIONS OF DOCUMENT REQUESTS FOR RESEARCH EFFORTS

VARIABLES	N	r	r^2	α
Reasons For Limited Use of Document Delivery				
... lack a specific citation	101	-.02	.00	n.s.
... prefer to browse	101	-.01	.00	n.s.
... need the document sooner than it can be delivered	101	.17	.03	.05
... personal cost inhibiting	101	-.17	.03	.05
... department cost inhibiting	101	-.17	.03	.05
... document can be obtained more easily from a library	101	.05	.00	n.s.
... document can be obtained more easily from a colleague	97	.15	.02	n.s.
... forget about using service	96	-.02	.00	n.s.
... prefer not to talk to the tape recorder	96	.18	.03	n.s.
Evaluations of Document Delivery				
... satisfaction with service	109	.03	.00	n.s.
... importance of availability of service	111	.07	.01	n.s.
... budget priority for service	109	.10	.01	n.s.

lations, however, were quite weak.

c) neither estimate was correlated with other uses of library services on campus.

d) neither estimate was correlated with the reasons for using the service.

e) the estimate of the percent of requests that were initiated to support teaching efforts was inversely correlated with the following reasons for limited use of Document Delivery, "I can easily obtain the document I need from a library of the University system without using Document Delivery" and "I need the document sooner than it can be delivered", and positively correlated with "My department finds the cost of using Document Delivery inhibiting." All three correlations were weak. None of the remaining reasons for limited use was significant.

The estimate of the percent of requests that were initiated to support research efforts was inversely correlated with the following reasons for limited use of Document Delivery, "My department finds the cost of using Document Delivery inhibiting" and "I find the cost of using Document Delivery inhibiting", and positively correlated with "I need the document sooner than it can be delivered." All three correlations were weak. None of the remaining reasons for limited use was significant.

f) the estimate of the percent of requests that were initiated to support teaching efforts was positively correlated with

the user's opinion of the budget priority that the library should give to Document Delivery and not correlated with either satisfaction with the service or the importance to the user of the availability of the service. The estimate of the percent of requests that were initiated to support research efforts was not correlated with any of the evaluations.

DISCUSSION

Before entering into a discussion and interpretation of the results of the data analyses, it would be useful to note the limitations of the survey. First, the survey was limited to a population of faculty at a single, large, urban, research university. Second, the response rate, while typical for a mail survey, was only 52%. Third, the questionnaire was designed to measure some fairly complex behaviors for which the subjects were required to make sophisticated distinctions. Fourth, the questionnaire measured recall of past behavior or currently held opinions. Fifth, the sample of users, whose data received the most detailed analyses, was composed of only 114 subjects. Sixth, the relationships reported in the data analyses were not particularly strong; in fact, most were quite weak. Consequently, while we offer the following interpretations of the data analyses, tendencies to generalize from these results should be tempered by these limitations.

Correlates of Nonuse/Use of Document Delivery

The data analyses indicated that there were, in effect, no differences between nonusers and users either in terms of their academic status or their collegiate affiliation. In addition, there did not appear to be any difference between nonusers and users in the degree to which they reported personally visiting libraries on campus. Access to a departmental reading room (i.e. as distinct from access to a university departmental library) did not appear to affect nonuse/use of Document Delivery. However, users of Document Delivery reported a greater tendency to call the library for information or assistance and to send someone to the library to get material. This suggests some intriguing possibilities. Users of Document Delivery may have a stronger tendency to seek assistance or to use the service of others when confronted with an information need. Users may have better defined information needs or perhaps an ability to articulate better their needs. They may simply have established a working relationship with the staff, or a particular staff member, in a library.

Among nonusers, the principal reasons for nonuse appear to be the ease with which they feel they can obtain documents from a library, their preference to browse for documents and their tendency to have a generalized need for information, as opposed to a need for a specific document. It appears therefore that the nonuse or use of Document Delivery may be a function of either the nature of the information need experienced by the faculty member or the faculty member's style of information-seeking, or both.

Correlates of Perceived Degree of Use of Document Delivery

The data analyses indicated that, among users of Document Delivery, the perceived degree of use was not related to academic status. Members of the College of Education reported a higher degree of use then did the members of the other collegiate units. The reasons for using Document Delivery that were most highly correlated with the degree of use were the appreciation for the follow-up to a request provided by Document Delivery when a document was not immediately available and the convenience factors of saving time and minimizing frustration and effort. The reasons for not using Document Delivery all of the time appear to be forgetfulness (which we suspect may be a cloaking variable for some sort of internal system for establishing the priority of a document requirement), urgency of the need for the document and getting the document from a library either personally or perhaps by sending someone else. Not surprisingly, the greater the degree of use of Document Delivery, the less frequently the subjects reported personally visiting a library. Given that there was no difference between users and nonusers of Document Delivery in terms of how frequently they reportedly visit a library, it would seem that either Document Delivery is providing a service that supplements the document needs of faculty above and beyond that which they would have availed themselves had not Document Delivery been available, or users of Document Delivery are heavier users of libraries than nonusers of Document Delivery but some of their use is being absorbed by Document Delivery. As was expected, the greater the degree of use of Document Delivery, the higher the evaluations of the service.

Our attempts at identifying correlates of use of Document Delivery for teaching efforts and research efforts were not very successful. Either the questions designed to elicit estimates of use for teaching and research purposes yielded imprecise data or the distinction between use of documents for teaching or research is not a useful one. Aside from weak correlations between affiliation with General College, the College of Education and use of documents for teaching, and affiliation with the Institute of Technology and use of documents for research, nothing much of interest was revealed in the data analyses.

APPENDIX A

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

March 23, 1984

Dear Colleague,

During the current academic year, the Institute of Technology Libraries have provided a Document Delivery service to assist you in retrieving documents (i.e. books, journal articles, microforms) from the University Library system. As part of an externally funded project to study the impact of a delivery service on faculty use of library resources, we are conducting surveys of Document Delivery users and nonusers. The purposes of these surveys are to determine the degree to which faculty and other University personnel use Document Delivery and to identify factors which affect their use of the service.

As a user of Document Delivery, you are in a position to provide us with much of this information; and, given the small size of our population, your participation is very important for the success of the user survey. We would appreciate your taking the time (about 5-10 minutes) to complete the enclosed questionnaire. The anonymity of your responses will be respected and the data will be reported only in the aggregate. For your convenience we have provided an addressed return envelope. If you should have any questions about the questionnaire, please do not hesitate to call the project director, George D'Elia, at 3-3100.

We hope that you will take the opportunity to participate in this project. We would appreciate your returning the questionnaire as soon as possible, but no later than April 4. Thank you for your cooperation.

Sincerely,

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

Andrea Hinding

Andrea Hinding, Director
Walter Library

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

March 23, 1984

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Sincerely,

Andrea Hinding

Andrea Hinding, Director
Walter Library

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

DOCUMENT DELIVERY PROJECT: USER SURVEY
INSTITUTE OF TECHNOLOGY LIBRARIES
WALTER LIBRARY

FUNDED BY THE COUNCIL OF LIBRARY RESOURCES

Dear Colleague:

Thank you for participating in this study. In completing this questionnaire, please note that we are interested only in the documents you obtain from libraries in the University Library system, not in the documents you obtain from departmental reading rooms or journal collections. For your information, a list of official University libraries is appended to the questionnaire. Please refer to this list if you have any doubts about the status of the libraries that you use.

1. In addition to using the Document Delivery service, do you also try to obtain documents from the library system either personally or through someone else (e.g., a colleague, student, or departmental staff person)?

   _____ YES, I do try to obtain some documents from the University Library system myself or through someone else. (PLEASE PROCEED TO QUESTION 2.)

   _____ NO, I use the Document Delivery service whenever I need a document from the University Library system. (PLEASE SKIP QUESTIONS 2 AND 3 AND PROCEED DIRECTLY TO QUESTION 4, ON PAGE 2.)

2. Considering all the documents that you have sought from the University Library system this current academic year, what is your estimate of the percent you requested through Document Delivery?

   _____ fewer than 20% _____ 20-39% _____ 40-59% _____ 60-79% _____ 80% or more

3. There are probably a variety of reasons why you choose at times not to use the Document Delivery service. We would like to get some sense of what these reasons might be.

   The statements that follow describe possible reasons why someone might choose at times not to use Document Delivery. Using the scale at the right, please indicate the degree to which each statement is applicable to you by checking the appropriate response category. Please be sure to respond to each statement.

	Not at all Applicable	Slightly Applicable	Moderately Applicable	Strongly Applicable	Very Strongly Applicable
A. I know in general what I need but lack a specific citation.	____	____	____	____	____
B. I prefer to browse my subject area before selecting a document.	____	____	____	____	____
C. I need the document sooner than it can be delivered.	____	____	____	____	____
D. I find the cost of using Document Delivery inhibiting.	____	____	____	____	____
E. My department finds the cost of using Document Delivery inhibiting.	____	____	____	____	____
F. I can easily obtain the document I need from a library of the University system without using Document Delivery.	____	____	____	____	____

CONTINUED ON NEXT PAGE.

	Not at all Applicable	Slightly Applicable	Moderately Applicable	Strongly Applicable	Very Strongly Applicable
G. I can easily obtain the document I need from a colleague.	____	____	____	____	____
H. I forget about Document Delivery.	____	____	____	____	____
I. I prefer not to talk to a tape-recorder answering machine.	____	____	____	____	____

J. Do you have any other reasons?
Please specify:_____

_____

_____

4. We would also like to identify the reasons why you choose to use the Document Delivery service.

The statements that follow describe possible reasons why someone might choose to use Document Delivery rather than trying to obtain a document from the University Library system either personally or through someone else. Using the scale at the right, please indicate the degree to which each statement is applicable to you by checking the appropriate response category. Please be sure to respond to each statement.

	Not at all Applicable	Slightly Applicable	Moderately Applicable	Strongly Applicable	Very Strongly Applicable
A. Using Document Delivery saves me time.	____	____	____	____	____
B. Using Document Delivery requires less effort.	____	____	____	____	____
C. Using Document Delivery is less frustrating.	____	____	____	____	____
D. I expect Document Delivery will be more successful at finding the document.	____	____	____	____	____
E. If the document is not immediately available, I appreciate Document Delivery's explanation.	____	____	____	____	____

F. Do you have any other reasons?
Please specify:_____

_____

_____

5. In general, how satisfied are you with the Document Delivery service?

___ Strongly dissatisfied ___ Moderately dissatisfied ___ Slightly dissatisfied ___ Slightly satisfied ___ Moderately satisfied ___ Strongly satisfied

6. Considering all of your requests to Document Delivery during the current academic year, . . .

   A. What is your estimate of the percent that were initiated to support your teaching efforts?

   _____ fewer than 20% _____ 20-39% _____ 40-59% _____ 60-79% _____ 80% or more

   B. What is your estimate of the percent that were initiated to support your research efforts?

   _____ fewer than 20% _____ 20-39% _____ 40-59% _____ 60-79% _____ 80% or more

7. How important to you is the availability of a University Library Document Delivery service?

   _____ Unimportant _____ Slightly important _____ Moderately important _____ Strongly important

8. Which of the following statements best describes the priority you think the library should give a Document Delivery service in a time of tight budgets?

   _____ Very low priority _____ Low priority _____ Medium priority _____ High priority _____ Very high priority

9. We would like to gather data on your estimate of how often you use, for whatever reason, any library of the University Library system.

   A. About how often do you <u>personally</u> visit a library of the University Library system?

   _____ Never _____ Less than once a month _____ Once a month _____ 2-3 times a month _____ Once a week _____ More than once a week

   B. About how often do you send someone else to a library of the University Library system to get what you need?

   _____ Never _____ Less than once a month _____ Once a month _____ 2-3 times a month _____ Once a week _____ More than once a week

   C. About how often do you call a library of the University Library system for information or assistance (<u>not</u> <u>including</u> Document Delivery)?

   _____ Never _____ Less than once a month _____ Once a month _____ 2-3 times a month _____ Once a week _____ More than once a week

10. Does your department have a department library, staff library, or reading room (not part of the University Library system)?

    _____ Yes (PLEASE PROCEED TO QUESTION 11.) _____ No (PLEASE SKIP QUESTION 11 AND PROCEED TO QUESTION 12, ON PAGE 4.)

11. How frequently do you use this department library, staff library, or reading room?

    _____ Never _____ Less than once a month _____ Once a month _____ 2-3 times a month _____ Once a week _____ More than once a week

Finally, we need a little information about you to help us analyze the preceding questions.

12. What is your rank at the University of Minnesota? (Please check only one response.)

_____ Regents' Professor

_____ Professor

_____ Associate Professor

_____ Assistant Professor

_____ Instructor

_____ Research Associate

_____ Research Fellow

_____ Professional/Administrative

_____ Other:_____

13. With what college are you associated? (Please check only one response.)

_____ College of Liberal Arts

_____ College of Education

_____ General College

_____ Institute of Technology

_____ Other:_____

13a. Please specify your department, school, or division:_____

Thank you for your help. Please feel free to add any further comments or suggestions in the remaining space.

Minnesota University Library System

Ames Library
Anderson Horticultural Library
Architecture Library
Archives (University Archives)
Art Library
Bio-Medical Library
Bio-Chemistry Library
Chemical Engineering Library
Chemistry Library
Children's Literature Research Collections
East Asian Library
Education, Psychology, and Library Science Library
Engineering Library
Entomology Library
Eric Sevareid Library (Journalism)
Forestry Library
Geology Library
Government Publications Library
Immigration History Research Center Collections
James Ford Bell Library
Journalism Library (Eric Sevareid Library)
Law Library
Manuscripts Collection
Map Library
Mathematics Library
Middle East Library
Mines, Metallurgy & Chemical Engineering Library
Music Library
Natural History Library
Physics Library
Plant Pathology Library
Public Administration Library
St. Paul Campus Central Library
Social Welfare History Archives
Special Collections and Rare Books Library
Tenant Memorial Library
University Archives
Veterinary Medical Library
Walter Library
Wangensteen Library
Wilson Library

*list prepared from University of Minnesota Libraries, Twin Cities: A Guide.

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

April 5, 1984

Dear Colleague,

Last week we invited you to participate in a study of the Document Delivery service offered by Walter Library and the Institute of Technology Libraries. We had asked that you complete the questionnaire that was enclosed and return it to us by April 4. If you have already done so, we thank you.

If you haven't yet had the chance to complete the questionnaire, we hope that this reminder will encourage you to take the time to do so. As a researcher, you are no doubt aware of how important the participation of each and every subject is to the success of a survey. We do need your help in bringing this study about faculty use of library resources to a successful conclusion.

We would appreciate your completing and returning the questionnaire as soon as possible, but no later than Tuesday, April 10. If you need another copy of the questionnaire, please call the project director, George D'Elia, at 3-3100. Thank you for your cooperation.

Sincerely,

Andrea Hinding

Andrea Hinding, Director
Walter Library

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

TABLE A.1

DESCRIPTIVE STATISTICS:
USER QUESTIONNAIRE

QUESTION NUMBER	N	% / $\bar{X}$	S.D.
1. ... obtain some documents from library yourself			
YES	102	88.7%	
NO	11	9.6%	
2. ... estimate of percent of documents requested through Document Delivery	101	2.61	1.50
3. A. ... lack a specific citation	103	2.94	1.47
B. ... prefer to browse	103	2.93	1.18
C. ... need the document sooner than it can be delivered	103	2.58	1.35
D. ... personal cost inhibiting	103	1.48	.88
E. ... department cost inhibiting	103	1.50	1.01
F. ... document can be obtained more easily from a library	103	2.46	1.[illegible]3
G. ... document can be obtained more easily from a colleague	99	1.92	.89
H. ... forget about using service	98	1.63	1.03
I. ... prefer not to talk to the tape recorder	98	1.33	.77
4. A. ... saves time	112	4.48	.88
B. ... requires less effort	112	4.33	.95
C. ... is less frustrating	112	3.74	1.44
D. ... Document Delivery will be more successful	112	3.18	1.66
E. ... appreciation of Document Delivery's follow-up	112	3.40	1.52

TABLE A.1 (cont'd)

DESCRIPTIVE STATISTICS:
USER QUESTIONNAIRE

QUESTION NUMBER	N	% / $\bar{X}$	S.D.
5. ... satisfaction with service	112	5.73	.50
6. A. ... percent of documents for teaching	107	2.03	1.28
B. ... percent of documents for research	112	3.83	1.36
7. ... importance of availability of service	114	3.65	.65
8. ... budget priority for service	112	3.95	.95
9. A. ... personally visit a library	115	3.98	1.41
B. ... send someone else to a library	115	2.70	1.46
C. ... call a library	114	2.71	1.19
10. ... access to department reading room			
YES	58	47.8%	
NO	55	50.4%	
11. ... use of department reading room	58	4.03	1.74
12. Regents' Professor	5	4.3%	
Professor	56	48.7%	
Associate Professor	16	13.9%	
Assistant Professor	18	15.7%	
Instructor	2	1.7%	
Research Associate	6	5.2%	
Research Fellow	0	0.0%	
Professional/Administrative	4	3.5%	
Other	8	7.0%	

TABLE A.1 (cont'd)

DESCRIPTIVE STATISTICS:
USER QUESTIONNAIRE

QUESTION NUMBER	N	% / $\bar{X}$	S.D.
13. College of Liberal Arts	17	14.8%	
College of Education	35	30.4%	
General College	4	3.5%	
Institute of Technology	43	37.4%	
Other	16	13.9%	

APPENDIX B

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

March 23, 1984

Dear Colleague,

During the current academic year, Walter Library has provided a Document Delivery service to assist the faculty in retrieving documents (i.e. books, journal articles, microforms) from the University Library system. As part of an externally funded project to study the impact of a delivery service on faculty use of library resources, we are conducting surveys of Document Delivery users and nonusers. The purpose of these surveys is to identify factors which affect faculty use or nonuse of Document Delivery.

Since you have not used Document Delivery this academic year (beginning September 1983), you are being considered, for the purposes of this study, a nonuser of the service. As such, you could provide us with helpful information about reasons for nonuse. We would appreciate your taking a few minutes, 5-10 at most, to complete the enclosed questionnaire. The anonymity of your responses will be respected and the data will be reported only in the aggregate. For your convenience we have provided an addressed return envelope. It would help us considerably if you could complete and return your questionnaire as quickly as possible, or by April 4 at the latest.

We hope that you will participate in this study and help make it a success. If you should have any questions about the questionnaire, please do not hesitate to call the project director, George D'Elia, at 3-3100. Thank you for your cooperation.

Sincerely,

Andrea Hinding

Andrea Hinding, Director
Walter Library

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

March 23, 1984

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Since you have not used Document Delivery this academic year (beginning September 1983), you are being considered, for the purposes of this study, a nonuser of the service. As such, you could provide us with helpful information about reasons for nonuse. We would appreciate your taking a few minutes, 5-10 at most, to complete the enclosed questionnaire. The anonymity of your responses will be respected and the data will be reported only in the aggregate. For your convenience we have provided an addressed return envelope. It would help us considerably if you could complete and return your questionnaire as quickly as possible, or by April 4 at the latest.

We hope that you will participate in this study and help make it a success. If you should have any questions about the questionnaire, please do not hesitate to call the project director, George D'Elia, at 3-3100. Thank you for your cooperation.

Sincerely,

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

Andrea Hinding

Andrea Hinding, Director
Walter Library

DOCUMENT DELIVERY PROJECT: NONUSER SURVEY
INSTITUTE OF TECHNOLOGY LIBRARIES
WALTER LIBRARY

FUNDED BY THE COUNCIL OF LIBRARY RESOURCES

Dear Colleague:

Thank you for participating in this study. In completing this questionnaire, please note that we are interested only in the documents you obtain from libraries in the University Library system, not in the documents you obtain from departmental reading rooms or journal collections. For your information, a list of official University libraries is appended to the questionnaire. Please refer to this list if you have any doubts about the status of the libraries that you use.

1. Before this survey, were you aware of the Document Delivery service?

_____ Yes (PLEASE PROCEED TO QUESTION 2.) _____ No

Now that you are aware of Document Delivery is there a likelihood of your using this service in the future?

_____ Yes _____ No

(PLEASE SKIP QUESTION 2 AND PROCEED DIRECTLY TO QUESTION 3, ON PAGE 2.)

2. There are probably a variety of reasons why you choose not to use the Document Delivery service. We would like to get some sense of what these reasons might be.

The statements that follow describe possible reasons why someone might choose not to use Document Delivery. Using the scale at the right, please indicate the degree to which each statement is applicable to you by checking the appropriate response category. Please be sure to respond to each statement.

	Not at all Applicable	Slightly Applicable	Moderately Applicable	Strongly Applicable	Very Strongly Applicable
A. I know in general what I need but lack a specific citation.	____	____	____	____	____
B. I prefer to browse my subject area before selecting a document.	____	____	____	____	____
C. I need the document sooner than it can be delivered.	____	____	____	____	____
D. I find the cost of using Document Delivery inhibiting.	____	____	____	____	____
E. My department finds the cost of using Document Delivery inhibiting.	____	____	____	____	____
F. I can easily obtain the document I need from a library of the University system without using Document Delivery.	____	____	____	____	____

CONTINUED ON NEXT PAGE.

	Not at all Applicable	Slightly Applicable	Moderately Applicable	Strongly Applicable	Very Strongly Applicable
G. I can easily obtain the document I need from a colleague.	____	____	____	____	____
H. I forget about Document Delivery.	____	____	____	____	____
I. I prefer not to talk to a tape-recorder answering machine.	____	____	____	____	____

J. Do you have any other reasons?
Please specify:_____

_____

_____

3. We would like to gather data on your estimate of how often you use, for whatever reason, any library of the University Library system.

A. About how often do you personally visit a library of the University Library system?

____ Never ____ Less than once a month ____ Once a month ____ 2-3 times a month ____ Once a week ____ More than once a week

B. About how often do you send someone else to a library of the University Library system to get what you need?

____ Never ____ Less than once a month ____ Once a month ____ 2-3 times a month ____ Once a week ____ More than once a week

C. About how often do you call a library of the University Library system for information or assistance (not including Document Delivery)?

____ Never ____ Less than once a month ____ Once a month ____ 2-3 times a month ____ Once a week ____ More than once a week

4. Does your department have a department library, staff library, or reading room (not part of the University Library system)?

____ Yes (PLEASE PROCEED TO QUESTION 5.) ____ No (PLEASE SKIP QUESTION 5 AND PROCEED TO QUESTION 6, ON PAGE 3.)

5. How frequently do you use this department library, staff library, or reading room?

____ Never ____ Less than once a month ____ Once a month ____ 2-3 times a month ____ Once a week ____ More than once a week

Finally, we need a little information about you to help us analyze the preceding questions.

6. What is your rank at the University of Minnesota? (Please check only one response.)

____ Regents' Professor

____ Professor

____ Associate Professor

____ Assistant Professor

____ Instructor

____ Research Associate

____ Research Fellow

____ Professional/Administrative

____ Other:_____

7. With what college are you associated? (Please check only one response.)

____ College of Liberal Arts

____ College of Education

____ General College

____ Institute of Technology

____ Other:_____

7a. Please specify your department, school, or division:_____

Thank you for your help. Please feel free to add any further comments or suggestions in the remaining space.

Minnesota University Library System

Ames Library
Anderson Horticultural Library
Architecture Library
Archives (University Archives)
Art Library
Bio-Medical Library
Bio-Chemistry Library
Chemical Engineering Library
Chemistry Library
Children's Literature Research Collections
East Asian Library
Education, Psychology, and Library Science Library
Engineering Library
Entomology Library
Eric Sevareid Library (Journalism)
Forestry Library
Geology Library
Government Publications Library
Immigration History Research Center Collections
James Ford Bell Library
Journalism Library (Eric Sevareid Library)
Law Library
Manuscripts Collection
Map Library
Mathematics Library
Middle East Library
Mines, Metallurgy & Chemical Engineering Library
Music Library
Natural History Library
Physics Library
Plant Pathology Library
Public Administration Library
St. Paul Campus Central Library
Social Welfare History Archives
Special Collections and Rare Books Library
Tenant Memorial Library
University Archives
Veterinary Medical Library
Walter Library
Wangensteen Library
Wilson Library

*list prepared from University of Minnesota Libraries, Twin Cities: A Guide.

UNIVERSITY OF MINNESOTA
TWIN CITIES

University Libraries
Minneapolis, Minnesota 55455

April 5, 1984

Dear Colleague,

Last week we invited you to participate in a study of the Document Delivery service offered by Walter Library and the Institute of Technology Libraries. We had asked that you complete the questionnaire that was enclosed and return it to us by April 4. If you have already done so, we thank you.

If you haven't yet had the chance to complete the questionnaire, we hope that this reminder will encourage you to take the time to do so. As a researcher, you are no doubt aware of how important the participation of each and every subject is to the success of a survey. We do need your help in bringing this study about faculty use of library resources to a successful conclusion.

We would appreciate your completing and returning the questionnaire as soon as possible, but no later than Tuesday, April 10. If you need another copy of the questionnaire, please call the project director, George D'Elia, at 3-3100. Thank you for your cooperation.

Sincerely,

Andrea Hinding

Andrea Hinding, Director
Walter Library

Ray Bohling

Ray Bohling, Acting Director
Institute of Technology Libraries

TABLE B.1

DESCRIPTIVE STATISTICS:
NONUSER QUESTIONNAIRE

QUESTION NUMBER	N	% / $\bar{X}$	S.D.
1. ... aware of Document Delivery			
YES	309	66.2%	
NO	153	32.8%	
... if no, likelihood of use			
YES	93	60.7%	
NO	42	27.5%	
2. A. ... lack a specific citation	302	2.32	1.25
B. ... prefer to browse	302	2.79	1.31
C. ... need the document sooner than it can be delivered	302	2.21	1.31
D. ... personal cost inhibiting	302	2.15	1.35
E. ... department cost inhibiting	302	1.90	1.35
F. ... document can be obtained more easily from a library	302	3.13	1.38
G. ... document can be obtained more easily from a colleague	290	2.01	1.00
H. ... forget about using service	290	2.34	1.31
I. ... prefer not to talk to the tape recorder	289	1.65	1.13
3. A. ... personally visit a library	461	3.88	1.48
B. ... send someone else to a library	461	2.21	1.36
C. ... call a library	460	2.05	.87
4. ... access to department reading room			
YES	256	54.8%	
NO	207	44.3%	

TABLE B.1 (cont'd)

DESCRIPTIVE STATISTICS:
NONUSER QUESTIONNAIRE

QUESTION NUMBER	N	% / $\bar{X}$	S.D.
5. . . . use of department reading room	256	4.04	1.67
6. Regents' Professor	2	.4%	
Professor	205	43.9%	
Associate Professor	99	21.2%	
Assistant Professor	69	14.8%	
Instructor	10	2.1%	
Research Associate	7	1.5%	
Research Fellow	8	1.7%	
Professional/Administrative	24	5.1%	
Other	43	9.2%	
7. College of Liberal Arts	73	15.6%	
College of Education	88	18.8%	
General College	59	13.6%	
Institute of Technology	205	43.9%	
Other	42	9.0%	